

## PUBLIC NOTICE

File Number: NRS 13.232 Notice Date: Expiration Date: November 26, 2013 December 28, 2013

Pursuant to Chapter 1200-4-7 of the Department's rules, the proposed activity described below has been submitted for approval under an Aquatic Resource Alteration Permit (this also includes §401 Water Quality Certifications). This notice is intended to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality No decision has been made whether to issue or deny this application.

**APPLICANT:** State of Tennessee

Department of Transportation Environmental Division Suite 900, J. K Polk Bldg. 505 Deaderick Street Nashville, TN 37243-0334

615-253-2466

**LOCATION:** SR-15 from Firetower Road to west of Bigbee Branch, File# NRS 13.232, Hardin County.

**PROJECT DESCRIPTION / PURPOSE:** The applicant proposes to construct 6.079 miles of State Route 15 along a modified alignment for public use involving impacts to streams and wetlands. See the impacts associated listed below.

Impact 1: Latitude: 35.2444 Longitude: -88.1144

Rocky Branch (STR1)

Station 454+38(L) to Sta. 457+90(R)+/-:

54 ft. of 2@4X8 ft. RCBC and 692 ft. of open stream to be replaced with 238 ft. of 16X12 ft. RCBC and 473 ft. of open stream (423' in kind replacement) and 50 ft. of Class B riprap at the inlet and outlet.

Impact 2: Latitude: 35.2446 Longitude: -88.1143

Trib to Rocky Branch (STR 1)

Station 457+75(R) 6" water line crossing. Original line to abandoned in place.

Impact 3: Latitude: 35.2450 Longitude: -88.1140

Trib to Rocky Branch (STR 2)

Station 457+75(L) to Sta. 461+60(L):

Existing 482 ft. of open stream relocated into a stream 390 ft. in length with 92' of stream length lost.

Impact 4: Latitude: 35.2452 Longitude: -88.1132

Wetland

Removal of two utility poles from a wetland.

Impact 5: Latitude: 35.2455 Longitude: -88.1102

Boon Creek (STR4)

Station 471+03.36:

Existing 52 ft. of 8X4 ft. RCBC and 263 ft. of open stream to be replaced with 215 ft. of 8X4 ft. RCBC and 100 ft. of open stream including 50 ft. of riprap at the inlet and outlet. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 6: Latitude: 35.2454 Longitude: -88.1092

Trib to Boon Creek (STR5) Station 471+02 to 479+20:

840 ft. of stream would be eliminated beneath roadway fill.

Impact 7: Latitude: 35.2459 Longitude: -88.1095

Wetland (WTL-4)

Station 471+60(L) to Sta. 474+50(L):

Permanent impact (filling) to 0.187 acre of wetlands.

Impact 8: Latitude: 35.2458 Longitude: -88.1081

Wetland (WTL-3)

Station 474+60(L) to 479+90(L):

Permanent impact (fill) to 0.431 acre of wetlands.

Impact 9: Latitude: 35.2455 Longitude: -88.1081

Wetland (WTL-2)

Permanent impact (filling) to 0.288 acre of wetlands.

Impact 10:Latitude: 35.2453 Longitude: -88.1060

Trib to Boon Creek (STR6) Station 482+00 to Sta. 483+45.16

Existing 55 ft. of 5X4 ft. and 428 ft. of open stream channel to be replaced with 158 ft. of 8X4 RCBC and 325 ft. of open stream (270 ft in kind replacement and 55 ft' transition) with 25' of riprap at the inlet and 50' of riprap at the outlet. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 11:Latitude: 35.2453 Longitude: -88.1034

Trib to Boon Creek (STR7)

Station 491+10:

Existing 60 ft. of 3X4 ft. RCBC and 288 ft. of open stream to be replaced with 168 ft. of 6X3 ft. and 120 ft. of open stream (70 ft transition at inlet and 32 ft. from outlet) with 50 ft. or riprap at the inlet and outlet. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 12:Latitude: 35.2451 Longitude: -88.1000

Wetland (WTL-5)

Station 501+10(R) to Sta. 501+55(R):

Permanent impact to 0.034 acre of wetlands.

Impact 13:Latitude: 35.2453 Longitude: -88.1000

Trib to Boon Creek (STR8)

Station 502+31:

Existing 75 ft. of 3X4 RCBC and 256 ft. of open stream to be replaced with 239 ft. of 48" RCP and 44 ft. of open stream with 25 ft. of riprap at the outlet. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 14:Latitude: 35.2452 Longitude: -88.0980

Trib to Boon Creek (STR9)

Station 507+25:

Existing 90 ft. of 4X3 ft. RCBC and 155 ft. of open stream to be replaced with 190 ft. of 8X6 ft. RCBC and 75 ft. of open channel including 25 ft. of riprap at the inlet and 50 ft. of riprap at the outlet. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 15:Latitude: 35.2458 Longitude: -88.0928

Trib to Boon Creek (SPR/STR-10) Station 522+80(R) to Sta. 523+14:

Existing 70 of open stream to be replaced with a spring box and 70 ft. of HDPE drain. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 16:Latitude: 35.2488 Longitude: -88.0886

Trib to Boon Creek (STR11)

Station 535+05(R) to Sta. 542+45(L):

Existing 90 ft. of 5X4 ft. RCBC and 542 ft. of open stream to be replaced with 398 ft. of 10X4 ft. RCBC and 232 ft. of open stream (175 in kind and 57 ft. transition) with 50 ft. riprap at the outlet (2 ft. stream loss). Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 17:Latitude: 35.2501 Longitude: -88.0863

Trib to Boon Creek (STR12) Station 542+59 to 553+60:

Existing 36 ft. of 48" RCP and 1354 ft. of open stream to be replaced with 24 ft. of 48" RCP and 1103 ft. of open stream (1103 in kind) with a 36" RCP outfall and 45 ft. of riprap at Sta. 548+70 and a 24" RCP outfall and 29 ft. of riprap at Sta. 553+71.

Impact 18:Latitude: 35.2517 Longitude: -88.0832

Wetland (WTL-6)

Station 558+50(L) to Sta. 562+00(L):

Permanent impact (filling) to 0.159 acre of wetlands.

Impact 19:Latitude: 35.2557 Longitude: -88.0751

Trib to Boon Creek (STR-13)

Station 586+25(L) to Sta. 588+20(L):

Existing 90 ft. of 72" CMP and 105 ft. of open stream to be replaced with 94 ft. of 72" RCP and 107 ft. of open stream (in kind). Also, install a 4" utility (water) line crossing.

Impact 20:Latitude: 35.2559 Longitude: -88.0734

Smith Fork Creek (STR-14)

Station 591+50:

Existing 114 ft. 4-span bridge to be replaced with 2 @ 300 ft. 3-span concrete girder bridge. Also, install a 6" utility (water) line crossing leaving the old line abandoned in place.

Impact 21:Latitude: 35.2568 Longitude: -88.0752

Smith Fork Creek (STR-15)

Station 595+40:

Existing 20 ft. of 2@66" CMP and 1@ 72" CMP and 30 ft. open stream to be replaced with 50 ft. of 2@66" CMP and 1 @ 72" CMP. Also, install a 6" utility (water) line crossing.

<u>Impact 22</u>:Latitude: 35.2593 Longitude: -88.0647

Smith Fork Creek (STR-15)

Station 617+34:

Existing 175 ft. of 2@5X8 RCBC and 250 ft. of open stream to be replaced with 328 ft. of 18X11 RCBC with 55 ft. of internal energy dissipater and 100 ft. of open stream with 50 ft. of riprap at the inlet and outlet, 30" RCP outfall with 30 ft. embedded class C riprap (Sta. 613+50(L) and 48" RCP outfall with 30 ft. of embedded Class C riprap (Sta. 620+50(R).

Impact 23:Latitude: 35.2598 Longitude: -88.0618

Smith Fork Creek (STR 15)

Station 628+67:

Existing 17 ft. open stream to be replaced with 17' of 24" RCP. Also, install a 6" utility (water) line

crossing.

Impact 24:Latitude: 35.2645 Longitude: -88.0532

Smith Fork Creek (STR 15)

Station 613+90(L):

Also, install a 6" utility (water) line crossing.

Impact 25:Latitude: 35.2564 Longitude: -88.0734

Trib to Smith Fork Creek (STR-18) Station 644+15(R) – Sta. 646+30(L):

Existing 155 of 5X4 RCBC and 290 ft. of open stream to be eliminated by road fill.

Impact 26:Latitude: 35.2645 Longitude: -88.0532

Smith Fork Creek (STR15)

Station 645+63:

6X4 ft. outfall structure with 25 ft. of embedded class B riprap. Also, install a 6" utility (water) line

crossing at Sta. 655+50.

<u>Impact 27</u>:Latitude: 35.2670 Longitude: -88.0463

Trib to Bigbee Branch (STR19)

Station 719+65:

Existing 191 ft. of 8X7 ft. RCBC and 325 ft. of open stream to be replaced with 386 ft. of 10X7 RCBC and 122 ft. of open stream with 50 ft. of riprap at the inlet and outlet and a 48" RCP outfall with 100 ft. of embedded class b riprap at Sta. 715+81(R).

<u>Impact 28</u>:Latitude: 35.2750 Longitude: -88.0266

Bigbee Branch (STR21)

Station 719+65:

Existing 140 ft. of 5 span concrete bridge and 399 ft. of open stream to be replaced with 2 @ 251.5 ft. 3-span concrete girder bridge and 402 ft. of open stream.

## Mitigation

The proposed project would impacts 3.839 acres of wetlands which would be mitigated by debiting at a 2:1 ratio 7.61 acres by payment to the Tennessee Mitigation Fund \$280,000. Stream impacts would be mitigated by 2870 ft. of in kind replacement and for the remaining 3611 ft. of encapsulation/loss a payment of \$866,640.00 would be made to the Tennessee In Lieu Fee Stream Mitigation Program.

**DEGRADATION:** In accordance with the Tennessee Antidegradation Statement (Rule 1200-4-3-.06), the division has determined that the proposed activities will result in degradation to water quality.

**WATERSHED** / **WATERBODY DESCRIPTION:** This project is in the Smith Fork Creek Watershed. The stream and its associated have similar morphological characteristics. The main tributary is approximately 30 ft. wide (10 ft. at base of channel) with 6 - 10 feet high banks and a boulder/gravel substrate. Water depth varies up to 1.5 ft. Vegetation at stream side is primarily low herbaceous (mowed). Surrounding land use if rural agricultural.

Stream Name / ID #: Smith Fork Creek TN05130205024\_0300

**Ecoregion:** Transition Hills

**Stream Dimension:** Channel bottom width 10'

Chanel top width 30' Water depth <1.5' Bank height 10'

**Substrate:** Cobble/Gravel

Designated UseUse Supportfish and aquatic lifefully supportingrecreationfully supportingindustrial water supplyfully supportingirrigationfully supportinglivestock watering & wildlifefully supporting

**Assessment Date:** 2012

PERMIT COORDINATOR: Brian Canada

**FACTORS CONSIDERED:** In deciding whether to issue or deny a permit, the department will consider all comments of record and the requirements of applicable federal and state laws. In making this decision, a determination will be made regarding the lost value of the resource compared to the value of any proposed mitigation. The department shall consider practicable alternatives to the alteration. The department shall also consider loss of waters or habitat, diminishment in biological diversity, cumulative or secondary impacts to the water resource, and adverse impact to unique, high quality, or impaired waters.

**COMMENTING:** Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced. Send all written comments to the department's address listed below and to the attention of the permit coordinator.

**PUBLIC HEARING**: Interested persons may request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department will hold a public hearing. Send all public hearing request to the department's address listed below and to the attention of the permit coordinator.

**FILE REVIEW:** The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address (listed below) for review and/or copying.

Tennessee Department of Environment & Conservation Division of Water Resources, Natural Resources Unit William R. Snodgrass Tennessee Tower, 11<sup>th</sup> Floor 312 Rosa L. Parks Ave Nashville, TN 37243



